

REMARKS

Claim 1 has been amended to incorporate the limitations of original claim 22. Claim 22 has been cancelled.

Claims 1-3, 5-16, 18, 19 and 22-25 stand rejected under 35 § 103(a) as being unpatentable over Court et al. (French Patent 2,772,038) in view of Okada (US 5,418,275). Applicant is aware of the Court et al. patent, as it was 100% commonly owned by Applicant at the time of the invention, and involves the same inventor. Applicant has attached an English Translation of the '038 reference.

In the Examiner's March 3, 2005 Communication to Applicant, the Examiner had found that "The rejection ...under 35 U.S.C. §103 relying on Court et al. has been withdrawn since it is the position of the Examiner that no *prima facie* case of obviousness can be made over this patent against the instant claims. The present rejection is a combination of the Court reference with the Okada reference.

The cited references fail to teach or suggest all of the claim limitations of the present (amended) invention, and therefore fail to present a *prima facie* case of obviousness under 35 §103(a). Specifically, the cited reference fails to teach or suggest a) a rigid material based on PPO and a polystyrene in which the ratio of PPO to polystyrene polymer weight ratio is between 1/9 and 9/1, b) an impact modifier having an S-B-M block polymer in which the S block of is compatible with the resin mixture.

a) The cited references fail to each or suggest Applicant's rigid material based on PPO and a polystyrene polymer where the PPO to polystyrene polymer weight ratio is between 1/9 and 9/1. PPO/polystyrene miscible blends are taught in the '038 reference (page 16, line 31 to page 17, line 3 of the translation provided) as a possible resin, however the PPO must be present at amount less than 10% of the total mass of the

thermoplastic resin. Applicant has amended claim 1 so that the PPO must be present at from 10 to 90 weight percent. These ranges are mutually exclusive, and one of skill in the art would not be motivated by a teaching of “less than 10%” to practice Applicant’s invention having 10-90 weight percent of PPO in the thermoplastic resin. Moreover, the “less than 10%” taught by the ‘038 reference teaches away from Applicant’s amended claims.

b) The cited references fail to each or suggest Applicant’s claimed impact modifier having an S-B-M block polymer in which the S block of is compatible with the resin mixture. The ‘038 reference clearly teaches a block copolymer in which “The C blocks are incompatible with the thermoplastic resin or resins” (page 8, lines 20-21 of the translation). Note the “S” block of Applicant’s invention is comparable to the “C” block of the ABC block polymer of the ‘038 reference. The ‘038 reference teaches this block as being “incompaticle” while Applicant’s invention involves the claimed “compatible” S block. One of skill in the art would not practice Applicant’s claimed “S is compatible with the resin (A)” from the teaching of the ‘038 reference that “the C block is incompatible with the thermoplastic resin...” (Claim 1 ‘038). Moreover, a teaching that this block must be incompatible clearly teaches away from Applicant’s claimed compatible block.

Applicant’s previous Remarks explaining why the ‘038 block is incompatible and why the present block is compatible with the resin, based on the syndiotactic/atactic nature of the semi-crystalline/non-crystralline polystyrene in the thermoplastic resin – while true- confuses the issue. The simple matter is that the ‘038 reference teaches a non-compaticle “C” block while the present invention claims a compatible “S” block, and these opposite requirements make the present claims non-obvious over the ‘038 reference.

US 5,418,275

The US 5,418,275 reference is cited by the Examiner as a secondary reference to show the benefits of a blend of polystyrene and syndiotactic polystyrene. Applicant agrees that the '038 reference discloses a blend of polystyrene and less than 10% of syndiotactic polystyrene. However, as described in the '038 reference, such a thermoplastic resin blend is not compatible with the "C" block taught in the '038 reference. Thus, one of two things must be true of the combination of the '038 and '275 references:

1) based on the '038 reference, one would not expect the syndiotactic polystyrene/PPO blend of the '275 reference to change the incompatibility of the "C" block and thermoplastic resin. In this case, the thermoplastic resin is incompatible with the "C" block – which is the opposite of Applicant's claim requirements that the "S" block and thermoplastic resin be compatible. OR,

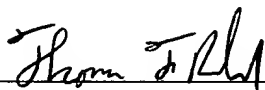
2) The '275 syndiotactic polystyrene/PPO blend somehow becomes compatible with the "C" block (which is not expected) – which would mean the proposed modification of the '038 reference by the '275 reference would render the prior art unsatisfactory for its intended use, and therefore the references cannot be combined under MPEP 2134.

Either way, the '275 reference fails to heal the defects of the '038 reference as 35 C.F.R. §103 (a) prior art against the present (amended) claims. Moreover the modifier of the '275 art is a PPO modified rubber, rather than a tri-block polymer.

Because of the above reasons, the cited art fails to present a *prima facie* case of anticipation under 35 U.S.C. §102(b) of the claims as amended.

Examination and allowance of the amended claims are earnestly solicited.

Respectfully submitted,



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